

ABSTRACT OF THE DISCLOSURE

A magnetic switching device is provided, which has a configuration different from that of a conventional example and is capable of enhancing an energy conversion efficiency for changing the magnetized state of a magnetic substance. A magnetic memory using the magnetic switching device also is provided. The magnetic switching device includes a magnetic layer, a transition layer magnetically coupled to the magnetic layer, and a carrier supplier including at least one selected from metal and a semiconductor. The transition layer and the carrier supplier are placed in such a manner that a voltage can be applied between the transition layer and the carrier supplier. The transition layer undergoes a non-ferromagnetism – ferromagnetism transition by the application of a voltage, and the magnetized state of the magnetic layer is changed by the transition of the transition layer.